

< [002] This application is a National Stage Completion of PCT/AT03/00064 filed March
< 6, 2003 which claims priority from Austrian application serial nos. GM 766/2002 filed
< November 12, 2002 and GM 143/2002 filed March 6, 2002.

< [003] Description Field of the Invention

< [005] Background of the Invention

< [008] Summary of the Invention

< [026] Brief Description of the Drawings

[027] The invention, ~~in the following~~, will be more fully detailed and explained with the
< aid of ~~[[a]] drawings of [[a]] schematically illustrated embodiments in which:-~~
< ~~Accordingly, attached is Fig. 1, which shows a first embodiment and Fig. 2~~
< ~~demonstrates a second embodiment of the invented device.~~

< [028] Fig. 1, is a schematic illustration of a first embodiment of the present invention,
< and

< [029] Fig. 2 is a schematic illustration of a second embodiment of the present
< invention.

< [030] Detailed Description of the Invention

[035] Underneath the transparent, i.e. translucent touch-sensitive membrane it is possible that corresponding glass spheres or beads can be placed as filling, which, by a disturbance of the covering membrane can be displaced. In each case, in accord with how many of the light diodes 11, 12 or 13 have been activated, that is to say, in accordance with how high the ambient external light intensity is in the immediate environment of the device 3, from the photo sensors 16 a different light impression is made evident, which can be correspondingly coded. The optical sensors 16 permit,

under these circumstances, stroke motions or even a pinch to be detected and correspondingly transmitted. Further, in addition to the optical impressions which can be obtained from the photocells, i.e. the optical sensors 16, ~~naturally, also~~ and the translation-motion on the buttons 10 can also naturally stand as sensor signals.

[036] Fig. 2 presents a varied embodiment of the device, wherein the previously described deformable cushion is omitted and predominately, touching sensors as well as optical signals are used for the transmission of emotional content. The apparatus 3 possesses an outer shape, which, with ergonomic considerations, favor a one-hand operation and which shape is comparable to a computer mouse. It is further a switch 5 for the on/off switching of the device and a freely programmable button 6 is provided, with which certain functions can be undertaken. The central element of the device 3 is an essentially circular touch or pressure sensitive surface 17 for the capture of movements such as stroking. The surface, that is the sensor 17, captures physical touching by means of pressure, deformation, or electrical signals which change themselves. Such signals, for example, can be obtained from arrays which can be designated: resistance-network, capacitive, hall sensor, or photo-cell. With an evaluation electronic circuit for a sensor of this kind, it is possible to determine the position of the emitting disturbance within the limits of the touch or pressure sensitive surface 17 as well as the quantitative size of the exercised disturbance. The touch or pressure sensitive surface 17 is designed to be transparent, so that the signals from below the display apparatus under the surface, such as ~~[[are]]~~ signals emitted from LCD's or LEDs, are visible. The surface 17, that is, the display apparatus, encompasses a multitude of areas 18, whereby each area of the display apparatus can be controlled alone and independently. This permits the illumination of the area in varied, different colors. The design in this case, can be so conceived, that each area 18 of the touch or pressure sensitive surface 17 has a corresponding area 18 of the display apparatus dedicated thereto. Further, that area, which was touched at the

sender is illuminated at the receiver. Thereby, it is permitted, that those stroke movements executed by the stroke movements of the first communication partner become correspondingly visible to a second communications partner.